

**IN THE CLAIMS:**

Please amend claims 1, 2, 4-8, and 10-24 as follows.

1. (Currently Amended) A method, of optimizing the compression efficiency in a packet data communication where a compression history of previous packets is used for the compression of a current packet, the method comprising:

    updating the ~~a~~ compression history selectively, wherein selection is performed based on a first algorithm for determining whether a packet shall be compressed, and on a second algorithm for determining whether a compressed packet shall be used for an update of the compression history.

2. (Currently Amended) The method according to claim 1, further comprising:

    ensuring a history consistency between a compressor and a decompressor by using ~~Transmission Control Protocol~~transmission control protocol, wherein the compressor monitors an acknowledgment signaling of a ~~Transmission Control Protocol~~transmission control protocol receiving meansreceiver.

3. (Original) The method according to claim 1, further comprising:

    ensuring a history consistency between a compressor and a decompressor by using a feedback between the compressor and the decompressor.

4. (Currently Amended) The method according to claim 2, further comprising:

enabling the compressor to safely infer a subset of a first context at the decompressor by monitoring the ~~Transmission Control Protocol~~transmission control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

5. (Currently Amended) The method according to claim 1, further comprising:

ensuring a history consistency between a compressor and a decompressor by combining use of ~~Transmission Control Protocol~~transmission control protocol, wherein the compressor monitors an acknowledgment signaling of a ~~Transmission Control Protocol~~transmission control protocol ~~receiving means~~receiver, with use of a feedback between the compressor and the decompressor.

6. (Currently Amended) A method, ~~of optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet,~~ the method comprising:

using a first algorithm in conjunction with a compressing device to decide if ~~the a~~ current packet should be compressed;

using a second algorithm in conjunction with the compressing device to decide which packets out of packets sent compressed are to be used to update a buffer of the compressing device;

signaling from the compressing device to a decompressing device such that the decompressing device knows which of the packets out of the packets sent are to be included in ~~the~~a compression history; and

~~using the decompressing device and a packet sequence number assigned by a compressor to update a buffer thereof in synchronization with the compressing device.~~

7. (Currently Amended) The method according to claim 6, further comprising:

ensuring a history consistency between the compressing device and ~~the~~a decompressing device by using ~~Transmission Control Protocol~~transmission control protocol, wherein the compressing device monitors an acknowledgment signaling of a ~~Transmission Control Protocol~~ receiving meantransmission control protocol receiver.

8. (Currently Amended) The method according to claim 7, further comprising:

enabling the compressing device to safely infer a subset of a first context at the decompressing device by monitoring the ~~Transmission Control Protocol~~transmission

control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

9. (Original) The method according to claim 6, further comprising:  
ensuring a history consistency between the compressing device and the decompressing device by using a feedback between the compressing device and the decompressing device.

10. (Currently Amended) The method according to claim 6, further comprising:

ensuring a history consistency between the compressing device and the decompressing device by combining use of ~~Transmission Control Protocol~~ transmission control protocol, wherein the compressing device monitors an acknowledgment signaling of a ~~Transmission Control Protocol~~ receiving meantransmission control protocol receiver, with use of a feedback between the compressing device and the decompressing device.

11. (Currently Amended) A ~~compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~updating means for updating a processor configured to update the a compression history selectively, the updating means processor having implemented and processing being configured to process a first algorithm related to whether a packet shall be compressed, and a second algorithm related to whether a compressed packet shall be used for an update of the compression history; and~~

~~storing means, operably connected to the updating means, for storing the compression history.~~

12. (Currently Amended) The ~~device apparatus~~ according to claim 11, further comprising:

~~monitoring means for monitoring a monitor configured to monitor an acknowledgment signaling of a Transmission Control Protocol receiving means transmission control protocol receiver, wherein the monitoring means monitor is operably connected to the updating means processor.~~

13. (Currently Amended) The ~~device apparatus~~ according to claim 12, wherein said monitoring means monitor is adapted configured to be enabled to safely infer a subset of a first context at a decompressor by monitoring Transmission Control Protocol transmission control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

14. (Currently Amended) The device apparatus according to claim 11, further comprising:

~~establishing means for establishing an establisher configured to establish a feedback between the compression device and a decompression device, wherein the establishing means establisher is operably connected to the updating means processor.~~

15. (Currently Amended) A ~~compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~signaling means for signaling a transmitter configured to signal to a decompression device which of a first set of packets are to be included in the a compression history, the signaling means transmitter having implemented and processing a first algorithm used to decide if the current packet should be compressed; and~~

~~buffer means, operably connected to the signaling means, for storing the compression history; and~~

~~processing means for having a processor configured to have implemented and processing a second algorithm, wherein the second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update the a buffer means, wherein the processing means processor is operably connected to the signaling means transmitter.~~

16. (Currently Amended) The ~~device~~ apparatus according to claim 15, further comprising:

~~means for monitoring a monitor configured to monitor an acknowledgment signaling of a Transmission Control Protocol receiving means~~transmission control protocol receiver, wherein the ~~monitoring means~~monitor is operably connected to the ~~signaling means~~transmitter.

17. (Currently Amended) The ~~device~~ apparatus according to claim 16, wherein the ~~monitoring means~~monitor is ~~adapted~~ configured to be enabled to safely infer a subset of a first context at a decompressor by monitoring a ~~Transmission Control Protocol transmission control protocol~~ acknowledgment signaling, wherein the subset is used as a second context for compression.

18. (Currently Amended) The ~~device~~ apparatus according to claim 15, further comprising:

~~establishing means for establishing~~an establishing unit configured to establish a feedback between the compression device and a decompression device, wherein the ~~establishing means~~establishing unit is operably connected to the ~~signaling means~~transmitter.

19. (Currently Amended) ~~A decompression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~An apparatus, comprising:

~~receiving means for receiving a receiver configured to receive signals from a compression device indicating which packets are to be included in the a compression history; and~~

~~buffer means, operably connected to the receiving means, for storing the compression history; and~~

~~processing means for processing a processor configured to process a packet sequence number for updating the a buffer means in synchronization with the compression device, wherein the processing means processor is operably connected to the receiving means receiver.~~

20. (Currently Amended) The ~~device apparatus~~ according to claim 19, further comprising:

~~forwarding means for forwarding a forwarding unit configured to forward an acknowledgment signaling of a Transmission Control Protocol transmission control protocol receiving means receiver to the compression device, wherein the forwarding means unit is operably connected to the receiving means receiver.~~

21. (Currently Amended) The ~~device~~ apparatus according to claim 19, further comprising:

~~establishing means for an~~ establishing unit configured to establish a feedback between the compression device and the decompression device, wherein the establishing means is operably connected to the ~~receiving means~~ receiver.

22. (Currently Amended) A ~~compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~a processor configured to allow~~ updating means for updating the ~~a~~ compression history selectively, the ~~processor~~ updating means having implemented ~~for implementing~~ and processing a first algorithm related to whether a packet shall be compressed, and a second algorithm related to whether a compressed packet shall be used for an update of the compression history; and

~~a memory unit, operably connected to the processor, for storing the compression history.~~

23. (Currently Amended) A ~~compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~a signaling unit configured to signal~~ signaling means for signaling a decompression device which of a first set of packets are to be included in the compression history, the ~~signaling unit~~ means having implemented and processing a first algorithm used to decide if the current packet should be compressed; and

~~a buffer, operably connected to the signaling unit, configured to store the compression history;~~ and

~~a processor configured to~~ processing means for ~~have~~ having implemented implementing and ~~to process~~ processing a second algorithm, wherein the second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update the buffer, wherein processor is operably connected to the means for signaling.

24. (Currently Amended) ~~A decompression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~a receiver configured to receive~~ receiving means for receiving signals from a compression device indicating which packets are to be included in ~~the~~ a compression history; and

~~a buffer, operably connected to the receiver, configured to store the compression history;~~ and

~~a processor configured to process~~ processing means for processing a packet sequence number for updating the buffer in synchronization with the compression device, wherein the processor is operably connected to the ~~receiver~~ receiving means.